



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/598,784	09/11/2006	Mitsunori Morisaki	U2054.0159	1349
32172	7590	07/16/2008	EXAMINER	
DICKSTEIN SHAPIRO LLP			WANG-HURST, KATHY W	
1177 AVENUE OF THE AMERICAS (6TH AVENUE)				
NEW YORK, NY 10036-2714			ART UNIT	PAPER NUMBER
			4173	
			MAIL DATE	DELIVERY MODE
			07/16/2008	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/598,784	MORISAKI, MITSUNORI	
	Examiner	Art Unit	
	KATHY WANG-HURST	4173	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1) Responsive to communication(s) filed on 11 September 2006.
 2a) This action is **FINAL**. 2b) This action is non-final.
 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4) Claim(s) 1,22-24 and 38-79 is/are pending in the application.
 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
 5) Claim(s) _____ is/are allowed.
 6) Claim(s) 1,22-24 and 38-79 is/are rejected.
 7) Claim(s) _____ is/are objected to.
 8) Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9) The specification is objected to by the Examiner.
 10) The drawing(s) filed on 11 September 2006 is/are: a) accepted or b) objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 a) All b) Some * c) None of:
 1. Certified copies of the priority documents have been received.
 2. Certified copies of the priority documents have been received in Application No. _____.
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) Notice of References Cited (PTO-892)
 2) Notice of Draftsperson's Patent Drawing Review (PTO-948)
 3) Information Disclosure Statement(s) (PTO/SB/08)
 Paper No(s)/Mail Date 11/03/2006.

4) Interview Summary (PTO-413)
 Paper No(s)/Mail Date. _____.
 5) Notice of Informal Patent Application
 6) Other: _____.

DETAILED ACTION

Preliminary Amendment

1. Preliminary amendment filed on 07/06/2007 has been entered. Claims 2-21 and 25-37 have been cancelled and claims 1 and 22-24 and 38-79 are pending for examination.

Claim Rejections - 35 USC § 101

2. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

3. Claims 38-52 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter. Claims 38-52 are directed to a computer program. However, a computer program is software *per se*, and therefore is not statutory. MPEP § 2106.01, Section I, states:

“Data structures not claimed as embodied in computer-readable media are descriptive material *per se* and are not statutory because they are not capable of causing functional change in the computer.

“Such claimed data structures do not define any structural and functional interrelationships between the data structure and other claimed aspects of the invention which permit the data structure's functionality to be realized.

“In contrast, a claimed computer-readable medium encoded with a data structure defines structural and functional interrelationships between the data structure and the computer software and hardware components which permit the data structure's functionality to be realized, and is thus statutory.”

To overcome this rejection, examiner suggests that any claims directed to the computer program/software be amended such that they embody the functional descriptive material on a computer-readable medium.

Claim Objections

4. Claim 78 is objected to because of the following informalities: the meaning of “subordinate” is unclear to the examiner. Appropriate correction is required.

Claim Rejections - 35 USC § 112

5. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.
6. Claim 73 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. The meaning of “said quality of said positioning is use application information” is unclear to the examiner.

Claim Rejections - 35 USC § 102

7. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

8. Claims 1 and 22-24 and 38-79 are rejected under 35 U.S.C. 102(e) as being anticipated by Karr et al. (US 6952181) herein after referred as Karr.

Regarding claim 1, Karr discloses a positioning system for determination a position of wireless station that is an object of positioning using measuring a communication

situation between a said wireless station that is an object of positioning and each of a plurality of wireless stations other than said wireless station that is an object of positioning, characterized in including:

a database having identification information of said wireless station that is an object of positioning, or identification information of said plurality of said wireless stations and necessary measurement number-of-times conclusion information for drawing a conclusion on a measurement number of times stored correspondingly to each other, said necessary measurement number- of-times conclusion information derived from a characteristic of said wireless station that is an object of positioning, or a characteristic of said plurality of said wireless stations, or a characteristic of a combination of said wireless station that is an object of positioning and said plurality of said wireless stations

(Abstract, finding location of a mobile station; and col. 61, Table SP-5, database having identification information of wireless stations; and col. 61 lines 21-41data from the table are used to determine number of CDMA fingers and pilots which are used to filter the incoming RF signal measurements, therefore identification information of wireless station leads to the number of measurements); and

a means for receiving identification information of said wireless station that is an object of positioning, or identification information of said plurality of said wireless stations, for retrieving necessary measurement number-of-times conclusion information corresponding to this identification information from said database, and for deciding the measurement number of times based upon this necessary measurement number-of-

times conclusion information (**col. 60 lines 55-59**).

Regarding claim 22, Karr discloses a positioning system for measuring a communication situation between a wireless station that is an object of positioning and each of a plurality of wireless stations other than said wireless station that is an object of positioning, thereby to specify a position of said wireless station that is an object of positioning, characterized in including a means for deciding a measurement number of times of the communication situation based upon a characteristic of said wireless station that is an object of positioning, or a characteristic of said plurality of said wireless stations, or a characteristic of a combination of said wireless station that is an object of positioning and said plurality of said wireless stations (**col. 61 lines 21-41****data from the Table SP-5 are used to determine number of CDMA fingers and pilots detectable which are used to filter the incoming RF signal measurements**).

Regarding claim 23, Karr discloses a positioning server for deciding a measurement number of times of a communication situation in a positioning system for measuring a communication situation between a wireless station that is an object of positioning and each of a plurality of wireless stations other than said wireless station that is an object of positioning, thereby to specify a position of said wireless station that is an object of positioning, characterized in including:
a database having identification information of said wireless station that is an object of positioning, or identification information of said plurality of said wireless stations and

necessary measurement number-of-times conclusion information for drawing a conclusion on the measurement number of times stored correspondingly to each other, said necessary measurement number- of-times conclusion information derived from a characteristic of said wireless station that is an object of positioning, or a characteristic of said plurality of said wireless stations, or a characteristic of a combination of said wireless station that is an object of positioning and said plurality of said wireless stations(**col. 61, Table SP-5, database having identification information of wireless stations; and col. 61 lines 21-41**data from the table are used to determine number of CDMA fingers and pilots detectable which are used to filter the incoming RF signal measurements, therefore identification information of wireless station leads to the number of measurements); and

a means for receiving identification information of said wireless station that is an object of positioning, or identification information of said plurality of said wireless stations, for retrieving necessary measurement number-of-times conclusion information corresponding to this identification information from said database, and for deciding the measurement number of times based upon this necessary measurement number-of-times conclusion information(**col. 60 lines 55-59**).

Regarding claim 24, Karr discloses a positioning server for deciding a measurement number of times of a communication situation in a positioning system for measuring a communication situation between a wireless station that is an object of positioning and each of a plurality of wireless stations other than said wireless station that is an object of

positioning, thereby to specify a position of said wireless station that is an object of positioning, characterized in including:

a database having a first table, said first table having identification information of said wireless station and group information, being information associated with a group of which a characteristic resembles that of the wireless station, caused to correspond to each other, and a second table filed, said second table having said group information and necessary measurement number-of-times conclusion information caused to correspond to each other, filed (**col. 61 lines 21-41** data from the Table SP-5 are used to determine number of CDMA fingers and pilots detectable which are used to filter the incoming RF signal measurements; In Table SP-5, first column is equivalent of first table and col. 5 and 6 are equivalent of second table); and a means for receiving identification information of said wireless station that is an object of positioning, or identification information of said plurality of said wireless stations, for retrieving group information corresponding to this identification information from said first table, for retrieving necessary measurement number-of-times conclusion information corresponding to this group information from said second table, and for deciding the measurement number of times based upon this necessary measurement number-of-times conclusion information(**col. 60 lines 55-59**).

Regarding claim 38, Karr discloses a program for causing an information processing unit to perform a process of deciding a measurement number of times of a communication situation in a positioning system for measuring a communication

situation between a wireless station that is an object of positioning and each of a plurality of wireless stations other than said wireless station that is an object of positioning, thereby to specify a position of said wireless station that is an object of positioning, characterized in causing said information processing unit to function as a means for receiving identification information of said wireless station that is an object of positioning, or identification information of said plurality of said wireless stations, for retrieving necessary measurement number-of-times conclusion information corresponding to the received identification information from a database having identification information of said wireless station that is an object of positioning, or identification information of said plurality of said wireless stations and necessary measurement number-of-times conclusion information for drawing a conclusion on the measurement number of times stored correspondingly to each other, said necessary measurement number-of-times conclusion information derived from a characteristic of said wireless station that is an object of positioning, or a characteristic of said plurality of said wireless stations, or a characteristic of a combination of said wireless station that is an object of positioning and said plurality of said wireless stations, and for deciding the measurement number of times based upon this necessary measurement number-of-times conclusion information (**col. 61, Table SP-5, database having identification information of wireless stations; and col. 61 lines 21-41** data from the table are used to determine number of CDMA fingers and pilots detectable which are used to filter the incoming RF signal measurements, therefore identification information of wireless station leads to the number of

measurements).

Regarding claim 39, Karr discloses a program for causing an information processing unit to perform a process of deciding a measurement number of times of a communication situation in a positioning system for measuring a communication situation between a wireless station that is an object of positioning and each of a plurality of wireless stations other than said wireless station that is an object of positioning, thereby to specify a position of said wireless station that is an object of positioning, characterized in causing said information processing unit to function as a means for receiving identification information of said wireless station that is an object of positioning, or identification information of said plurality of said wireless stations, for retrieving group information corresponding to this identification information from a table having said identification information of said wireless station and group information, being information associated with a group of which a characteristic resembles that of the wireless station, caused to correspond to each other, retrieving necessary measurement number-of-times conclusion information corresponding to this group information from a table having said group information and the necessary measurement number-of-times conclusion information caused to correspond to each other, and for deciding the measurement number of times based upon this necessary measurement number-of-times conclusion information (**col. 61, Table SP-5, database having identification information of wireless stations; and col. 61 lines 21-41data from the table are used to determine**

number of CDMA fingers and pilots detectable which are used to filter the incoming RF signal measurements).

Regarding claim 40, Karr discloses the program according to claim 39, characterized in that said group information is at least one of a model number of the wireless station, a model number of an IC for wireless communication mounted onto the wireless station, manufacturer information of an IC for wireless communication mounted onto the wireless station, and wireless communication technique information to which the IC for wireless communication mounted onto the wireless station corresponds (**col. 61, Table SP-5**).

Regarding claim 41, Karr discloses the program according to claim 39, characterized in causing said information processing unit to function as a means for acquiring MIB information, thereby to acquire said group information (**col. 60 lines 55-59**).

Regarding claim 42, Karr discloses the program according to claim 39, characterized in that said necessary measurement number-of-times conclusion information is a measurement number of times (**col. 61 lines 21-41** data from the Table SP-5 are used to determine number of CDMA fingers and pilots detectable which are used to filter the incoming RF signal measurements, therefore identification information of wireless station leads to the number of measurements).

Regarding claim 43, Karr discloses the program according to claim 39, characterized in that said necessary measurement number-of-times conclusion information is a standard deviation of a dispersion in an internal process delay in the wireless station that is an object of positioning or the other wireless station (**col. 60 line 47-48 delay spread; col. 79 line 30 standard deviations**).

Regarding claim 44, Karr discloses the program according to claim 39, characterized in causing the information processing unit to function as a means for updating the necessary measurement number-of-times conclusion information of the database based upon an acquired measurement result (**col. 6 line 42-col. 7 line25, updating table**).

Regarding claim 45, Karr discloses the program according to claim 39, characterized in causing the information processing unit to function as a means for performing an operational process weighted with a total measurement number of times for the necessary measurement number-of-times conclusion information and a measurement result, thereby to update the necessary measurement number-of-times conclusion information of the database (**col. 6 line 42-col. 7 line25, updating table**).

Regarding claim 46, Karr discloses the program according to claim 39, characterized in causing the information processing unit to function as a means for performing an operational process weighted with a total measurement number of times for the necessary measurement number-of-times conclusion information, an acquired

measurement result, and a past measurement result, thereby to update the necessary measurement number-of-times conclusion information of the database (**col. 6 line 42-col. 7 line25, updating table**).

Regarding claim 47, Karr discloses the program according to claim 39, characterized in that said measurement of said communication situation is a measurement of a radio wave propagation time (**Abstract, two-way TOA, Time of Arrival and TDOA, time Difference of Arrival; col. 61 line 37 RF Signal measurement**).

Regarding claim 48, Karr discloses the program according to claim 39, characterized in that the information processing unit has a connection with each of said plurality of said wireless stations via a network (**col. 10 lines 36-39**).

Regarding claim 49, Karr discloses the program according to claim 39, characterized in that said necessary measurement number-of-times conclusion information is information prepared by taking into consideration a characteristic of the wireless station that is an object of positioning, or a characteristic of the wireless station other than the wireless station that is an object of positioning, or a characteristic of a combination of said wireless station that is an object of positioning and the wireless station other than said wireless station that is an object of positioning, and a positioning quality that is requested (**col. 61 lines 21-41data from the Table SP-5 are used to determine number of CDMA fingers and pilots detectable which are used to filter the**

incoming RF signal measurements).

Regarding claim 50, Karr discloses the program according to claim 49, characterized in that said quality of said positioning is positioning precision information (**Abstract**).

Regarding claim 51, Karr discloses the program according to claim 49, characterized in that said quality of said positioning is use application information (**col. 60 lines 1-7**).

Regarding claim 52, Karr discloses the program according to claim 39, characterized in that said identification information of said wireless station is at least one of a person name using the wireless station, a personal ID of a person using the wireless station, an appliance name registered to a wireless station appliance, an MAC address of the wireless station, an IP address of the wireless station, and an arbitrary ID allocated to the wireless station (**col. 61, Table SP-5**).

Regarding claim 53, Karr discloses a method of deciding a measurement number of times in a positioning system for measuring a communication situation between a wireless station that is an object of positioning and each of a plurality of wireless stations other than said wireless station that is an object of positioning, thereby to specify a position of said wireless station that is an object of positioning, characterized in including a step of deciding the measurement number of times of the communication situation based upon a characteristic of said wireless station that is an object of

positioning, or a characteristic of said plurality of said wireless stations, or a characteristic of a combination of said wireless station that is an object of positioning and said plurality of said wireless stations (**col. 61, Table SP-5, database having identification information of wireless stations; and col. 61 lines 21-41data from the table are used to determine number of CDMA fingers and pilots detectable which are used to filter the incoming RF signal measurements**).

Regarding claim 54, Karr discloses the method of deciding the measurement number of times according to claim 53, characterized in including the steps of:

pre-storing identification information of said wireless station that is an object of positioning, or identification information of said plurality of said wireless stations, and necessary measurement number-of-times conclusion information for drawing a conclusion on the measurement number of times correspondingly to each other, said necessary measurement number- of-times conclusion information derived from the characteristic of said wireless station that is an object of positioning, or the characteristic of said plurality of said wireless stations, or the characteristic of a combination of said wireless station that is an object of positioning and said plurality of said wireless stations (**col. 61, Table SP-5, database having identification information of wireless stations; and col. 61 lines 21-41data from the table are used to determine number of CDMA fingers and pilots detectable which are used to filter the incoming RF signal measurements, therefore identification information of wireless station leads to the number of measurements**); and

retrieving necessary measurement number-of-times conclusion information corresponding to the received identification information of the wireless station that is an object of positioning, or to the received identification information of the plurality of the wireless stations to decide the measurement number of times based upon this necessary measurement number-of-times conclusion information (**col. 61 lines 21-41data from the Table SP-5 are used to determine number of CDMA fingers and pilots detectable which are used to filter the incoming RF signal measurements**).

Regarding claim 55, Karr discloses the method of deciding the measurement number of times according to claim 53, characterized in including the steps of: pre-storing identification information of the wireless station and the necessary measurement number-of-times conclusion information via group information, being information associated with a group of which the characteristic resembles that of the wireless station, correspondingly to each other; and retrieving necessary measurement number-of-times conclusion information corresponding to the received identification information of the wireless station that is an object of positioning, or to the received identification information of the plurality of the wireless stations via the group information to decide the measurement number of times based upon this necessary measurement number-of-times conclusion information (**col. 61 lines 21-41data from the Table SP-5 are used to determine number of CDMA fingers and pilots detectable which are used to filter the incoming RF signal measurements, therefore identification information of wireless station leads to**

the number of measurements).

Regarding claim 56, Karr discloses the method of deciding the measurement number of times according to claim 55, characterized in that said group information is at least one of a model number of the wireless station, a model number of an IC for wireless communication mounted onto the wireless station, manufacturer information of an IC for wireless communication mounted onto the wireless station, and wireless communication technique information to which the IC for wireless communication mounted onto the wireless station corresponds (**col. 61, Table SP-5, database having identification information of wireless stations).**

Regarding claim 57, Karr discloses the method of deciding the measurement number of times according to claim 55, characterized in including a step of acquiring MIB information, thereby to acquire said group information (**col. 61, Table SP-5**).

Regarding claim 58, Karr discloses the method of deciding the measurement number of times according to claim 53, characterized in that said necessary measurement number-of times conclusion information is a measurement number of times (**col. 61 lines 21-41 data from the Table SP-5 are used to determine number of CDMA fingers and pilots detectable which are used to filter the incoming RF signal measurements, therefore identification information of wireless station leads to**

the number of measurements).

Regarding claim 59, Karr discloses the method of deciding the measurement number of times according to claim 53, characterized in that said necessary measurement number-of-times conclusion information is a standard deviation of a dispersion in an internal process delay in the wireless station that is an object of positioning or the other wireless station (**col. 60 line 47-48 delay spread; col. 79 line 30 standard deviations**).

Regarding claim 60, Karr discloses the method of deciding the measurement number of times according to claim 53, characterized in including a step of updating the necessary measurement number-of-times conclusion information based upon an acquired measurement result (**col. 6 line 42-col. 7 line25, updating table**).

Regarding claim 61, Karr discloses the method of deciding the measurement number of times according to claim 60, characterized in including a step of performing an operational process weighted with a total measurement number of times for the necessary measurement number-of-times conclusion information and the measurement result, thereby to update the necessary measurement number-of-times conclusion information (**col. 6 line 42-col. 7 line25, updating table**).

Regarding claim 62, Karr discloses the method of deciding the measurement number of times according to claim 61, characterized in including a step of performing an operational process weighted with a total measurement number of times for the necessary measurement number-of-times conclusion information, the acquired measurement result, and a past measurement result, thereby to update the necessary measurement number-of-times conclusion information (**col. 6 line 42-col. 7 line25, updating table**).

Regarding claim 63, Karr discloses the method of deciding the measurement number of times according to claim 53, characterized in that said measurement of said communication situation is a measurement of a radio wave propagation time (**Abstract and col. 61 line 37**).

Regarding claim 64, Karr discloses the method of deciding the measurement number of times according to claim 53, characterized in that said plurality of said wireless stations perform said measurement of said communication situation (**col. 61 lines 21-41data from the Table SP-5 are used to determine number of CDMA fingers and pilots detectable which are used to filter the incoming RF signal measurements**).

Regarding claim 65, Karr discloses the method of deciding the measurement number of times according to claim 53, characterized in that said wireless station that is an object

of positioning performs said measurement of said communication situation (**Abstract**).

Regarding claim 66, Karr discloses the method of deciding the measurement number of times according to claim 53, characterized in that said wireless station performing said measurement of said communication situation is a wireless base station (**col. 11 lines 28-39**).

Regarding claim 67, Karr discloses the method of deciding the measurement number of times according to claim 53, characterized in that said wireless station performing said measurement of said communication situation is a wireless terminal station (**col. 11 lines 28-39**).

Regarding claim 68, Karr discloses the method of deciding the measurement number of times according to claim 53, characterized in that said decision of the measurement number of times of said communication situation is performed by a positioning server having a connection with each of said plurality of said wireless stations via a network (**col. 11 lines 28-39**).

Regarding claim 69, Karr discloses the method of deciding the measurement number of times according to claim 53, characterized in that said decision of the measurement number of times of said communication situation is performed by said plurality of said

wireless stations(**col. 11 lines 28-39**).

Regarding claim 70, Karr discloses the method of deciding the measurement number of times according to claim 53, characterized in that said decision of the measurement number of times of said communication situation is performed by said wireless station that is an object of positioning (**col. 11 lines 28-39**).

Regarding claim 71, Karr discloses the method of deciding the measurement number of times according to claim 53, characterized in that said necessary measurement number-of-times conclusion information is information prepared by taking into consideration the characteristic of the wireless station that is an object of positioning, or the characteristic of the wireless station other than the wireless station that is an object of positioning, or the characteristic of a combination of said wireless station that is an object of positioning and the wireless station other than said wireless station that is an object of positioning, and a positioning quality that is requested (**col. 45 line25-26**).

Regarding claim 72, Karr discloses the method of deciding the measurement number of times according to claim 71, characterized in that said quality of said positioning is positioning precision information (**col. 39 line57-58**).

Regarding claim 73, Karr discloses the method of deciding the measurement number of times according to claim 71, characterized in that said quality of said positioning is use

application information (**col. 82 line 27**).

Regarding claim 74, Karr discloses the method of deciding the measurement number of times according to claim 53, characterized in that said identification information of said wireless station is at least one of a person name using the wireless station, a personal ID of a person using the wireless station, an appliance name registered to a wireless station appliance, an MAC address of the wireless station, an IP address of the wireless station, and an arbitrary ID allocated to the wireless station(**col. 61, Table SP-5, first column mobile station identification**).

Regarding claim 75, Karr discloses a positioning system for measuring a communication situation between a wireless station that is an object of positioning and each of a plurality of wireless stations other than said wireless station that is an object of positioning, thereby to specify a position of said wireless station that is an object of positioning, characterized in including a means for, based upon a set measurement number of times and a measurement result based upon said set measurement number of times, obtaining a new measurement number of times to performing the positioning again by this measurement number of times (**col. 61 lines 21-41data from the Table SP-5 are used to determine number of CDMA fingers and pilots detectable which are used to filter the incoming RF signal measurements, therefore identification information of wireless station leads to the number of measurements**).

Regarding claim 76, Karr discloses a method of deciding a measurement number of times in a positioning system for measuring a communication situation between a wireless station that is an object of positioning and each of a plurality of wireless stations other than said wireless station that is an object of positioning, thereby to specify a position of said wireless station that is an object of positioning, characterized in including a step of, based upon a set measurement number of times and a measurement result based upon said set measurement number of times, deciding a new measurement number of times (**col. 6 line 42-col. 7 line25, updating table**).

Regarding claim 77, Karr discloses a positioning server, characterized in: based upon a measurement result of a communication situation between each of a plurality of wireless stations having a connection therewith and a wireless station that is a subordinate of said plurality of said wireless stations, specifying a position of said wireless station that is an subordinate (**col. 11 lines 28-39 telephony infrastructure, which is further defined in col. 10 lines 36-39**); and deciding a measurement number of times of the communication situation based upon a characteristic of said wireless station that is an subordinate, or a characteristic of said plurality of said wireless stations, or a characteristic of a combination of said wireless station that is an subordinate and said plurality of said wireless stations(**col. 61 lines 21-41data from the Table SP-5 are used to determine number of CDMA fingers and pilots detectable which are used to filter the incoming RF signal**

measurements).

Regarding claim 78, Karr discloses a wireless station, characterized in: receiving a positioning request including information associated with a characteristic of a wireless station that is a subordinate from a server having a connection therewith to measure a distance with said wireless station that is a subordinate, and to send this measured distance to said server in which a position of a terminal, being a subordinate, is specified (**col. 30 lines 31-44**); and deciding a measurement number of times of said distance based upon said characteristic of said wireless station that is a subordinate(**col. 61 lines 21-41****data from the Table SP-5 are used to determine number of CDMA fingers and pilots detectable which are used to filter the incoming RF signal measurements).**

Regarding claim 79, Karr discloses a wireless station, characterized in: receiving a positioning request from a server, said positioning request from said server including a characteristic of its own wireless station and a requested positioning quality, to measure distances with a plurality of the wireless stations each of which is a connection destination, to send said measured distances to said server having a connection with said plurality of said wireless stations, in which a position of its own wireless station is specified (**col. 10 lines 55-67**): and deciding a measurement number of times of said distance based upon said characteristic of its own wireless station and said requested positioning quality (**col. 61**

lines 21-41data from the Table SP-5 are used to determine number of CDMA fingers and pilots detectable which are used to filter the incoming RF signal measurements).

Conclusion

9. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Dupray (US 2004/0266457) discloses a wireless location gateway and various location finding techniques.

DiBuduo (US 6999778) discloses a multi-path assistance for pilot phase measurement processes.

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to KATHY WANG-HURST whose telephone number is (571)270-5371. The examiner can normally be reached on Monday-Thursday, 7:30am-5pm, alternate Fridays, EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Benny Tieu can be reached on (571)272-7490. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/KATHY WANG-HURST/
Examiner, Art Unit 4173

/Benny Q Tieu/
Supervisory Patent Examiner, Art Unit 4173